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\*Admitted only in Maryland  
\*Admitted only in Virginia  
\*Practice Limited to  
Federal Agencies

*IFW \$2617*

April 13, 2006

**WRITER'S DIRECT NUMBER:**  
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VBEASTON@SKGF.COM

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**Art Unit 2617**

**Attn: Mail Stop Amendment**

Re: U.S. Utility Patent Application  
Application No. 09/550,644; Filed: April 14, 2000  
For: **Method and System for Down-Converting an Electromagnetic Signal,  
Transforms for Same, and Aperture Relationships**  
Inventors: Sorrells *et al.*  
Our Ref: 1744.0010009

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Credit Card Payment Form (PTO-2038) in the amount of \$180.00 to cover the Information Disclosure Statement fee;
2. Fee Transmittal Form (PTO/SB/17);
3. Eleventh Supplemental Information Disclosure Statement;
4. Form PTO-1449 listing eighteen (18) documents; and
5. One return postcard.

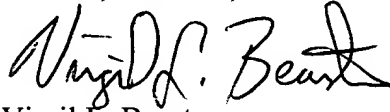
It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents  
April 13, 2006  
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

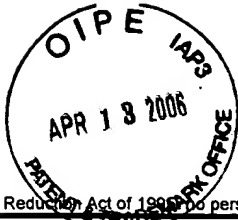
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Virgil L. Beaton". The signature is fluid and cursive, with the first name "Virgil" being more prominent.

Virgil L. Beaton  
Attorney for Applicants  
Registration No. 47,415

VLB/sjc  
Enclosures

520173\_1.DOC



PTO/SB/17 (01-06)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2006

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) \$180.00

**Complete if Known**

Application Number	09/550,644
Filing Date	April 14, 2006
First Named Inventor	David F. Sorrells
Examiner Name	Bhattacharya, Sam
Art Unit	2617
Attorney Docket No.	1744.0010009

**METHOD OF PAYMENT (check all that apply)**☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_☒ Deposit Account Deposit Account Number: 19-0036 Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES****Fee Description**

Each claim over 20 (including Reissues)

Fee (\$)	Small Entity Fee (\$)
50	25
200	100
360	180

Each independent claim over 3 (including Reissues)

Multiple dependent claims

**Total Claims**      **Extra Claims**      **Fee (\$)**      **Fee Paid (\$)**

- 20 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of total claims paid for, if greater than 20.

**Indep. Claims**      **Extra Claims**      **Fee (\$)**      **Fee Paid (\$)**

- 3 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of independent claims paid for, if greater than 3.

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<b>Total Sheets</b>	<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>
_____ - 100 = _____	_____ / 50 = _____	(round up to a whole number) x _____	= _____	

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Information Disclosure Statement fee \$180.00**SUBMITTED BY**

Signature		Registration No. (Attorney/Agent)	47,415	Telephone	(202) 371-2600
Name (Print/Type)	Virgil L. Beaton	Date	4/13/06		

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

SORRELLS *et al.*

Appl. No.: 09/550,644

Filed: April 14, 2000

**For: Method and System for Down-  
Converting an Electromagnetic  
Signal, Transforms for Same, and  
Aperture Relationships**

Confirmation No.: 9317

Art Unit: 2617

Examiner: Bhattacharya, Sam

Atty. Docket: 1744.0010009

**Eleventh Supplemental Information Disclosure Statement**

***Mail Stop Amendment***

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this Eleventh Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Tenth Supplemental Information Disclosure Statement filed on March 14, 2006 in connection with the above-captioned application.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

04/14/2006 JADD01 00000070 09550644

01 FC:1806

180.00 OP

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

Applicants provide the following comments regarding the documents:

Documents AC72, AD72, and AG72 are co-owned patents which are directed to related subject matter.

Documents AE72 and AF72 were cited in an Office Action in related U.S. Patent Application No. 10/394,069, filed March 24, 2003, entitled "Method and Circuit for Down-Converting a Signal," directed to related subject matter. Also cited in said Office Action was U.S. Patent No. 6,836,650, which has already been cited in the present application.

Documents AF72, AH72, and AI72 were cited in an Office Action in related U.S. Patent Application No. 11/173,021, filed July 5, 2005, entitled "Method and Circuit for Down-Converting a Signal," directed to related subject matter.

Documents AA73-AI73, AA74, and AB74 were cited in an Office Action in related U.S. Patent Application No. 10/305,299, filed November 27, 2002, entitled "Method and Apparatus for Improving Dynamic Range In a Communication System," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,339,459 and 5,517,688, which have already been cited in the present application.

This statement should not be construed as a representation that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below:

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received

by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.

- ☐ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.
- ☒ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.
- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more

than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

☒ c. Attached is our PTO-2038 Credit Card Payment Form in the amount of \$180.00 in payment of the fee under 37 C.F.R. § 1.17(p).

☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$ \_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:

☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

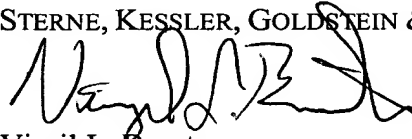
- ☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.
- ☐ 6. A concise explanation of the relevance of the non-English language documents appears below in accordance with 37 C.F.R. § 1.98(a)(3):
- ☒ 7. In accordance with 37 C.F.R. § 1.98(a)(2), copies of the U.S. patents and patent publications cited on the attached Form PTO-1449 are not enclosed.
- ☐ 8. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. \_\_\_\_\_, filed \_\_\_\_\_, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).
- ☒ 9. It is expected that the examiner will review the prosecution and cited art in the parent application nos. 09/521,879, filed March 9, 2000, 09/293,342, filed April 16, 1999 (now U.S. Pat. No. 6,687,493), and 09/176,022, filed October 21, 1998 (now U.S. Pat. No. 6,061,551), in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution histories has been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed Form PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

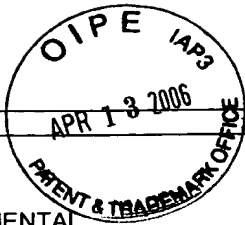


Virgil L. Beaton  
Attorney for Applicants  
Registration No. 47,415

Date: 4/13/06

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Washington, D.C. 20005-3934  
(202) 371-2600

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FORM PTO-1449

**ELEVENTH SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT**ATTY. DOCKET NO.  
1744.0010009APPLICATION NO.  
09/550,644FIRST NAMED INVENTOR  
David F. SORRELLSFILING DATE  
April 14, 2000ART UNIT  
2617**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC72	7,010,286 B2	03/2006	Sorrells <i>et al.</i>			
	AD72	7,010,559 B2	03/2006	Rawlins <i>et al.</i>			
	AE72	5,131,014	07/1992	White			
	AF72	6,393,070 B1	05/2002	Reber			
	AG72	7,016,663 B2	03/2006	Sorrells <i>et al.</i>			
	AH72	3,694,754	09/1972	Baltzer			
	AI72	4,931,716	06/1990	Jovanovic <i>et al.</i>			

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

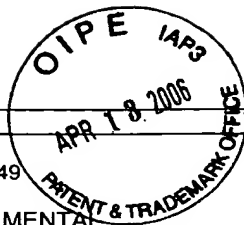
**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)**

EXAMINER INITIAL	DOC. REF.	CITATION
	AN	
	AO	
	AP	
	AQ	
	AR	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

**ELEVENTH SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT**ATTY. DOCKET NO.  
1744.0010009APPLICATION NO.  
09/550,644FIRST NAMED INVENTOR  
David F. SORRELLSFILING DATE  
April 14, 2000ART UNIT  
2617**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA73	3,617,898	11/1971	Janning, Jr.			
	AB73	3,764,921	10/1973	Huard			
	AC73	4,158,149	06/1979	Otofuji			
	AD73	4,380,828	04/1983	Moon			
	AE73	4,562,414	12/1985	Linder <i>et al.</i>			
	AF73	4,814,649	03/1989	Young			
	AG73	4,845,389	07/1989	Pyndiah <i>et al.</i>			
	AH73	5,172,019	12/1992	Naylor <i>et al.</i>			
	AI73	5,263,198	11/1993	Geddes <i>et al.</i>			

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

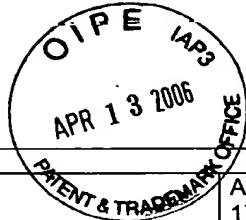
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**ELEVENTH SUPPLEMENTAL  
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1744.0010009APPLICATION NO.  
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David F. SORRELLSFILING DATE  
April 14, 2000ART UNIT  
2617**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA74	5,551,076	08/1996	Bonn			
	AB74	5,633,610	05/1997	Maekawa <i>et al.</i>			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)**

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